

**Software Architecture Documentation**

**Picturesque System**

**Advanced Programming practices project - FALL 2022**

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**Revision History**

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| --- | --- | --- | --- |
| **Version** | **Primary Author(s)** | **Description of version** | **Date Completed** |
| v1.0 | Raveena Choudhary | Initial version |  |
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**Introduction**

In the era of digitalization, everyone is luring customers by providing them with various discounts to register on their websites, whereas customers always want something they can easily find online and free of cost. “**Picturesque System**” intends fulfil customers' requirements without paying unnecessary hefty amounts to download pictures to use in their blogs, websites, and possibly where they want to use those pictures.

This system is a platform to download free photos online in any size i.e., medium, large, and original as per the end-user requirements. Furthermore, end users can use the downloaded photos on their websites, blogs, and as wallpaper etc.

**1.1 Purpose**

The purpose of this document is to provide a detailed architectural overview of the new Picturesque System, using several different architectural views to depict different aspects of the system.

**1.2 Scope**

This Software Architecture Document incorporates many views of the system, and the technologies used to build the system.

**Architectural Representation**

This section details the architecture design used to build the system.

The system is divided by layers: Database layer, Application layer and Presentation layer(also known as UI layer). Each of this division is vital for the system to operate.

**2.1 Architecture Diagram**

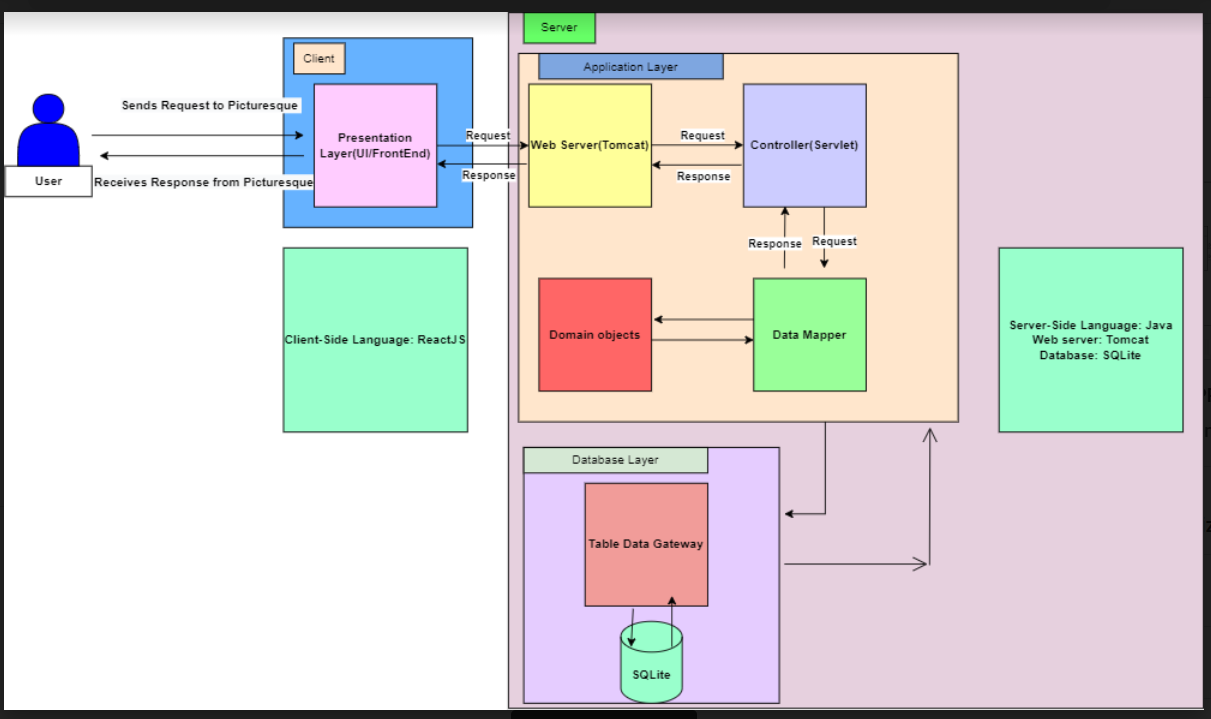
*Request handling at client-side:*

Here we are using client-server architecture where user will send request (example: likes a photo) to picturesque system , that request will be send to tomcat server(web server) which calls the servlets to process the incoming request and receives a response and sends that response to the client.

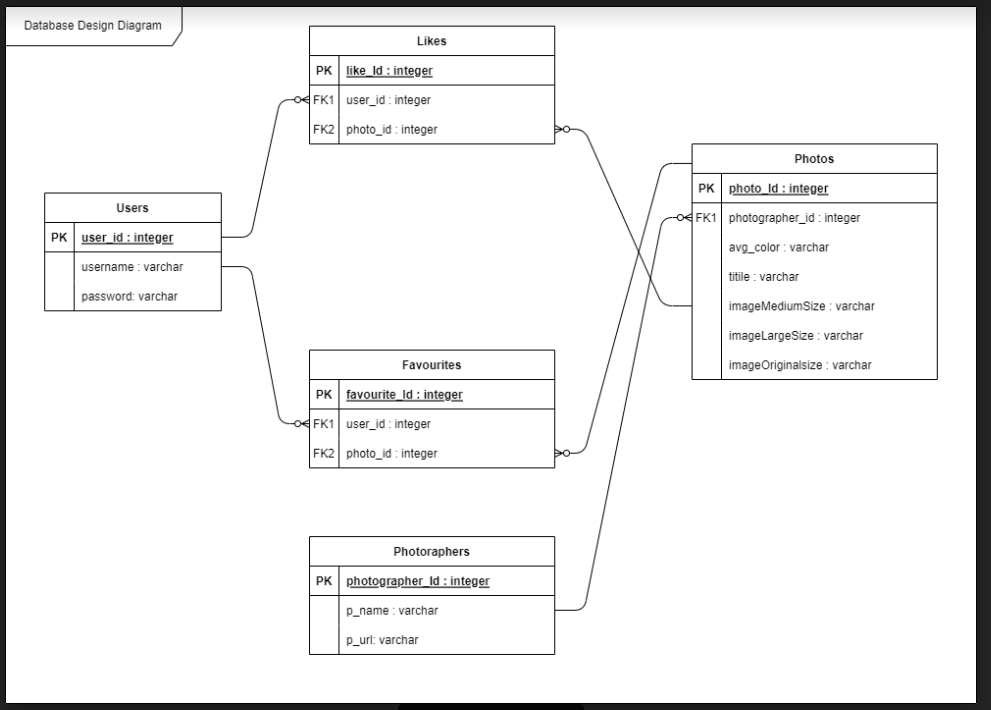
*Request processing at server-side:*

As mentioned above, tomcat will call servlet, then servlet will verify request parameters if any and sends call to data mapper which in turn will call table data gateway and domain object. Once, data mapper receives any result, with the help of domain object it maps the data in relevant form( here we are using JSON). Data mapper will then send that to servlet and servlets sends that back to tomcat server.

At the end, the user will be able to see the liked photos.



**2.2 Database Modelling Diagram:**



**2.3 Class Diagram:**

